

HD



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/954,775	09/18/2001	Michael Orlando Cimini	13DV13971	7795
29399 7590 04/12/2007 JOHN S. BEULICK (12729) C/O ARMSTRONG TEASDALE LLP ONE METROPOLITAN SQUARE SUITE 2600 ST. LOUIS, MO 63102-2740			EXAMINER VAN DOREN, BETH	
			ART UNIT	PAPER NUMBER
			3623	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/12/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/954,775

Applicant(s)

CIMINI ET AL.

Examiner

Beth Van Doren

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/06/2007 has been entered.
2. Claims 1, 9, and 15 have been amended. Claims 1-20 are pending in this application.

Response to Amendment

3. Applicant's amendments to claims 1, 9, and 15 are sufficient to overcome the 35 USC § 112, second paragraph, rejections set forth in the previous office action.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Powers et al. (U.S. 6,604,084) in view of Suzuki et al. (U.S. 6,625,511).

As per claim 1, Powers et al. discloses a system for evaluating process performance, said system comprising:

Art Unit: 3623

a device (See figure 1 and column 2, line 58-column 3, line 13, wherein a client device is disclosed); and

a server connected to said device and configured to receive process production capability information data using a computer, from a user via said device (See figure 1, column 2, lines 58-67, and column 3, lines 14-24), said server further configured to:

compile the received information (See column 2, lines 1-12, column 3, lines 39-55, column 4, lines 20-40, column 9, lines 14-32, which compile received information);

display to the user information related to the production process (See column 2, lines 1-12, column 3, lines 39-55, column 4, lines 20-40, and column 5, lines 25-28, wherein information is displayed to a user);

compare the received information in the form of answers to respective questions to reference information in the form of answers to questions developed to encompass an expected range of answers from the users responding to the questions, wherein each question is related to at least one category of the production process (See column 4, lines 25-40, column 5, lines 10-28, column 9, lines 7-18 and 28-47, column 11, line 49-column 12, line 10 and lines 44-51, which discloses processing the received information against reference information. The received information is in the form of answers to questions stored in the system. These answers are compared against all possible answers to the questions. See column 1, lines 34-46 and 58-65, column 3, lines 43-column 4, line 25, column 8, line 61-column 9, line 20 and lines 48-64, and column 13, lines 32-45, which discloses the relationship of questions to performance areas and categories); and

display the results of the compared information to the user via said device wherein the results include a numerical score representing a relative capability of the process being evaluated to perform a desired function (See column 2, lines 1-12 and 50-60, column 3, lines 39-55, column 4, lines 20-40, and column 5, lines 25-28, wherein results information is displayed to a user. These results concern the evaluation of productivity and quality of a process); and

display information useful in determining the overall performance and identifying ways to improve performance (See column 4, lines 25-35),

wherein the results and information are sortable based on filters associated with categories of the process (See column 4, lines 25-35, column 5, lines 10-30, column 6, line 66-column 7, line 11, and column 13, lines 25-50 and 63-67).

Wherein the at least one suggestion is based on the received information in the form of answers to respective questions (See column 4, lines 25-40, column 5, lines 10-28, column 9, lines 7-18 and 28-47, column 11, line 49-column 12, line 10 and lines 44-51, which discloses processing the received information against reference information. The received information is in the form of answers to questions stored in the system).

However, Powers et al. does not expressly disclose that the desired function is a manufacturing function or displaying at least one suggestion for improving performance, wherein the suggestions are sortable .

Suzuki et al. discloses manufacturing functions and displaying at least one suggestion for improving performance, wherein the suggestions are sortable (See figure 11, column 7, lines 60-67, column 12, lines 30-40 and 60-67, column 19, lines 15-35, column 20, lines 55-63, which discloses evaluating a manufacturing process and/or function and displaying point by point

Art Unit: 3623

suggestions for improvement. See specifically column 20, lines 54-67, which discloses sorting the results and displaying improvements in descending order).

Powers et al. discloses a performance evaluation system that uses questions and production associated with performance areas to generate quality and performance reports concerning an individual, group, process, or other suitable type of item or operation. Powers et al. specifically discloses that the results and information displayed are sortable based on filters associated with categories of the process. Manufacturing functions are a type of process or operation. Suzuki et al. discloses evaluating manufacturing processes and/or functions and displaying suggestions for improvement via a computer display, wherein improvements are displayed sorted in descending order. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the performance evaluation system of Powers et al. in the manufacturing field in order to more efficiently generate evaluation data and reports in the manufacturing industry through application of an automated system. Powers et al. discusses the ability of the system to allow an enterprise to set up the performance evaluation system to fit the organizational structure of that specific enterprise, thus making the tool customizable to any enterprise and enterprise situation. See column 2, lines 58-64, column 5, lines 10-20 and line 65-column 6, line 5. Further, it would have been obvious to one of ordinary skill in the art at the time of the invention to display suggestions to the user based on the performance evaluation performed by Powers et al. in order to more efficiently improve the quality of the manufactured items by reducing the likelihood of errors associated with manufacturing. See Suzuki et al., column 3, lines 20-25, 37-45, and 60-67.

Art Unit: 3623

As per claim 2, Powers et al. discloses wherein said server is further configured to receive information pertaining to process performance evaluation categories selected by the user (See column 9, lines 47-64, column 11, lines 32-60, wherein the evaluation categories are set up by a user).

As per claim 3, Powers et al. discloses wherein said server is further configured to receive information regarding at least one of a planning, shop practices, and operator skill (See column 9, lines 5-30, which discloses receiving information regarding operator skill).

As per claim 4, Powers et al. discloses wherein said server is further configured to receive information regarding at least one of a complexity, conditions, control, error proofing, measurement, and process (See column 2, lines 50-60, column 3, lines 45-60, which discloses productivity analysis of the process).

As per claim 5, Powers et al. discloses wherein said server further configured to receive information including a numerical score that expresses a relative capability of a process performance (See column 1, line 57-column 2, line 12 and lines 51-57, column 3, lines 45-60, column 4, lines 26-36, column 9, lines 48-55, and column 13, lines 20-35, wherein information is received that expresses a relative capability of a process performance). However, Powers does not expressly disclose that this process performance is performing a desired manufacturing function.

Powers et al. discloses a performance evaluation system that utilizes productivity and quality data. Powers et al. specifically discloses that the performance evaluation system is used to evaluate an individual, a group, a process, or other suitable types of operation. See column 2, lines 50-60, and column 5, lines 45-52. Therefore, it would have been obvious to one of

Art Unit: 3623

ordinary skill in the art at the time of the invention to receive information regarding the process of a manufacturing function in order to more efficiently perform a performance evaluation this process by efficiently communicating with users of a network environment that have input regarding the process. See column 1, lines 35-47, and column 2, lines 1-12, which discuss the benefits of such an automated system.

As per claim 6, Powers et al. discloses wherein said server is further configured to:

assign received information a weighted value (See column 9, lines 10-30, and column 11, line 62-column 12, line 25, wherein a weighted value is assigned received information);

sum received information weights (See column 9, lines 10-30, column 10, lines 1-12, and column 11, line 62-column 12, line 25, wherein received information is summed);

evaluate weighted summed data (See column 9, lines 10-30, column 10, lines 1-12, and column 11, line 62-column 12, line 25, wherein the data is evaluated); and

display results in a ranked order based on weighted data (See column 2, lines 1-12, column 3, lines 39-55, column 4, lines 20-40, and column 5, lines 25-28, wherein results are displayed, the results based on the weights).

As per claim 7, Powers et al. teaches wherein said device is configured to be a server for a network of customer devices (See figure 1 and column 2, line 58-column 3, line 22, column 5, lines 25-45, wherein the device serves to other devices).

As per claim 8, Powers et al. discloses wherein said server and said device are connected via a network (See figure 1, column 3, lines 1-20, column 5, lines 39-45, wherein the server and device are connected via a network).

Art Unit: 3623

As per claim 9, Powers et al. teaches a method for evaluating performance capabilities of a production process by operating a system including a server and at least one device connected to the server, said method comprising:

determining evaluation area categories based on an evaluation of the production performance capabilities of at least one of the process and the part being evaluated (See figure 5A-B, column 1, line 58-column 2, line 5 and lines 50-60, column 8, line 60-column 9, line 17 and lines 45-60, wherein evaluation areas are established to evaluate performance capabilities of the process); and

receiving, using a computer, information relevant to the capabilities of the production process within the evaluation categories (See column 2, lines 1-12 and 50-60, column 5, lines 25-30, column 9, wherein information is received).

Powers et al. and Suzuki et al. further teaches the remaining elements, which are equivalent to limitations in claim 1. Therefore, these elements are rejected using the same art and rationale set forth above in the rejection of claim 1.

As per claim 10, Powers et al. discloses assigning a weight factor to information received within each evaluation category (See column 9, lines 10-30, column 10, lines 1-12, and column 11, line 62-column 12, line 25, which disclose weight factors).

Claim 11 recites substantially similar elements to claim 5 and is therefore rejected using the same art and rational as set forth above.

As per claim 12, Powers et al. discloses wherein displaying the results further comprises numerically ranking the production process evaluation areas based on the results (See column 2,

Art Unit: 3623

lines 1-12, column 3, lines 39-55, column 4, lines 20-40, and column 5, lines 25-28, wherein results are displayed in a numerically ordered ranking).

As per claim 13, Powers et al. teaches wherein displaying the results further comprises displaying the results in a format that facilitates comparisons between a plurality of production process evaluation areas (See column 3, line 43-column 4, line 15 and lines 25-35, column 5, lines 25-30, wherein the results are shown by date, time, user, hierarchical level, etc.).

As per claim 14, Powers et al. teaches wherein determining evaluation area categories further comprises selecting at least one evaluation area category that represents at least one of production complexity, conditions, control, error proofing, measurement, operator skill, planning, process, and shop practices (See figures 5A-B, column 2, lines 50-60, column 3, lines 45-60, column 9, lines 5-30, which disclose at least operator skill and productivity analysis).

As per claim 15, Powers et al. teaches a method for evaluating performance of a production process using a network connecting a plurality of users, the network including a server and a plurality of user display devices, said method comprising:

receiving from the users using a computer, information concerning evaluation categories relevant to the production process (See column 2, lines 1-12 and 50-60, column 5, lines 10-27, column 9, lines 20-45, which disclose soliciting information from users);

assigning each evaluation category at least one weighted factor that normalizes the received information with respect to the received information's relative contribution to a process capability improvement (See column 9, lines 10-30, column 10, lines 1-12, and column 11, line 62-column 12, line 25, which disclose weight factors that regulate each questions worth in the overall score);

Art Unit: 3623

Powers et al. and Suzuki et al. further teaches the remaining elements, which are equivalent to limitations in claim 1. Therefore, these elements are rejected using the same art and rationale set forth above in the rejection of claim 1.

Claims 16, 17, 19, and 20 recite substantially similar elements as claims 13, 14, 5, and 12, respectively, and are therefore rejected using the same art and rationale as set forth above.

As per claim 18, Powers et al. discloses wherein soliciting from the users information concerning evaluation categories further comprises soliciting information from the users via at least one of a survey, radio push-buttons, and pull-down menu (See column 9, lines 20-45, which disclose at least radio buttons and drop-down lists).

Response to Arguments

6. Applicant's arguments with regards to the rejections based on Powers et al. (U.S. 6,604,084) in view of Suzuki et al. (U.S. 6,625,511) have been fully considered, but they are not persuasive. In the remarks, Applicant argues that (1) neither Powers et al. nor Suzuki et al. teach or suggest displaying at least one suggestion for improving performance of a desired manufacturing function, wherein the suggestions are sortable by the users based on the categories of the production process, (2) neither Powers et al. nor Suzuki et al. teach or suggest that the at least one suggestion is based on the received information in the form of answers to respective questions, (3) that it would not have been obvious to one of ordinary skill in the art at the time of the invention to combine Powers et al. and Suzuki et al. because there is no motivation to combine the references suggested in the art, (4) the combination of Powers et al. and Suzuki et al. is based on hindsight reasoning.

Art Unit: 3623

In response to argument (1), Examiner respectfully disagrees. The claims recite “displaying at least one suggestion for improving performance of a desired manufacturing function, wherein the suggestions are sortable based on categories of production process”. Examiner relied on Powers et al. to disclose the display information useful in determining the overall performance and identifying ways to improve performance, where results and information of Powers are sortable based on filters associated with categories of the process. See at least column 4, lines 25-35, column 5, lines 10-30, column 6, line 66-column 7, line 11, and column 13, lines 25-50 and 63-67, which discloses identifying ways to improve performance and sorting output based on categories and performance areas. Examiner expressly stated that Powers et al. does not disclose that the desired function is a manufacturing function or displaying at least one suggestion for improving performance, wherein the suggestions are sortable.

Suzuki et al. discloses manufacturing functions and displaying at least one suggestion for improving performance, wherein the suggestions are sortable. See figure 11, column 7, lines 60-67, column 12, lines 30-40 and 60-67, column 19, lines 15-35, column 20, lines 55-63, which discloses evaluating a manufacturing process and/or function and displaying point by point suggestions for improvement. See specifically column 20, lines 54-67, which discloses sorting the results and displaying improvements in descending order. Examiner notes that the fact that the process is a manufacturing function is intended use, which does not result in a structural difference between the claimed invention and the prior art, and thus does not patentably distinguish the claimed invention from the prior art.

Thus, the combination of Powers et al. in view of Suzuki et al. does teach and suggest each and every limitation of the claims.

Art Unit: 3623

In response to argument (2), examiner first notes that this limitation is newly added in the current amendments. However, examiner notes that this limitation seems to duplicate the previously presented limitation of “compare *the received information in the form of answers to respective questions*”. See column 4, lines 25-40, column 5, lines 10-28, column 9, lines 7-18 and 28-47, column 11, line 49-column 12, line 10 and lines 44-51, which discloses processing the received information against reference information. The received information is in the form of answers to questions stored in the system. These sections expressly disclose questions, questions tables, and answers to the questions being received for evaluation purposes.

In response to argument (3) that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Powers et al. discloses a performance evaluation system that generates quality and performance reports concerning an individual, group, process, or other suitable type of item or operation. See column 2, lines 58-64, column 5, lines 10-20 and line 65-column 6, line 5, where Powers et al. discusses the ability of the system to allow an enterprise to set up the performance evaluation system to fit the organizational structure of that specific enterprise, thus making the tool customizable to any enterprise and enterprise situation. Examiner notes that **Manufacturing functions are a type of process or operation**. Suzuki et al. discloses evaluating manufacturing processes and/or functions and displaying suggestions for

Art Unit: 3623

improvement via a computer display. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the performance evaluation system of Powers et al. in the manufacturing field in order to more efficiently generate evaluation data and reports in the manufacturing industry through application of an automated system, as suggested by the cited passage of Powers et al. above. Further, it would have been obvious to one of ordinary skill in the art at the time of the invention to display suggestions to the user based on the performance evaluation performed by Powers et al. in order to more efficiently improve the quality of the manufactured items by reducing the likelihood of errors associated with manufacturing. See Suzuki et al., column 3, lines 20-25, 37-45, and 60-67. Thus, as stated above, there is motivation found in the art itself for such a combination.

In response to argument (4), In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beth Van Doren whose telephone number is (571) 272-6737. The examiner can normally be reached on M-F, 8:30-5:00.

Art Unit: 3623

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


bvd

April 9, 2007



Beth Van Doren
Patent Examiner
Art Unit 3623